

## ABSTRACT OF THE DISCLOSURE

[66] Certain embodiments of the present invention relate to a signal-to-noise ratio dependent image processing system. The method includes computing at least one SNR for at least one region of an image, determining a filter parameter for at least one region based on the at least one SNR, and processing at least one region of the image based on the filter parameter. In addition to SNR, a filter parameter may be determined using user preferences. The system includes a signal-to-noise ratio processor for determining a signal-to-noise ratio for an image. The system also includes a parameter selection unit for selecting at least one filter parameter based on the signal-to-noise ratio. The system further includes an image filter for filtering the image based on the filter parameter(s). In an embodiment, the SNR processor determines signal-to-noise ratio(s) for region(s) in the image.